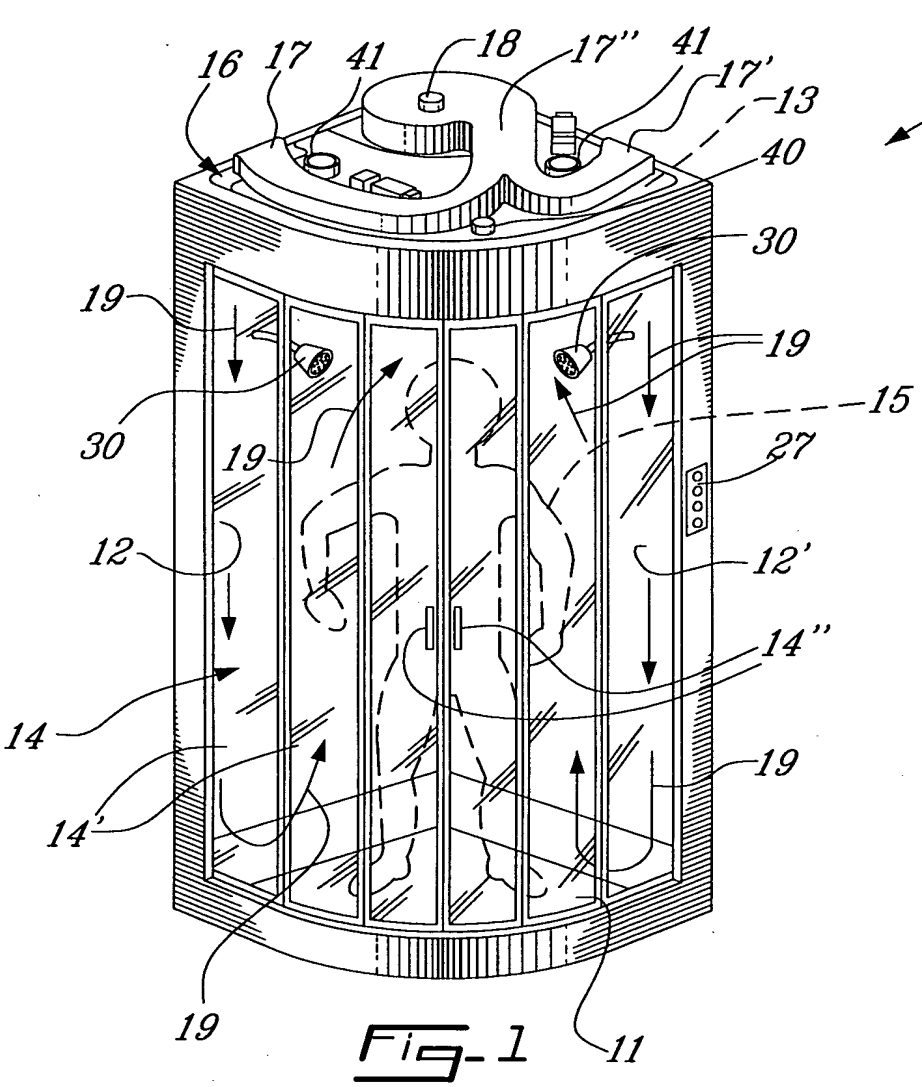
10
16
17
41
18
17''
41
17'
13
40
30
19
30
19
15
27
12
12'
14''
14
19
14'
19
11

Fig- 1

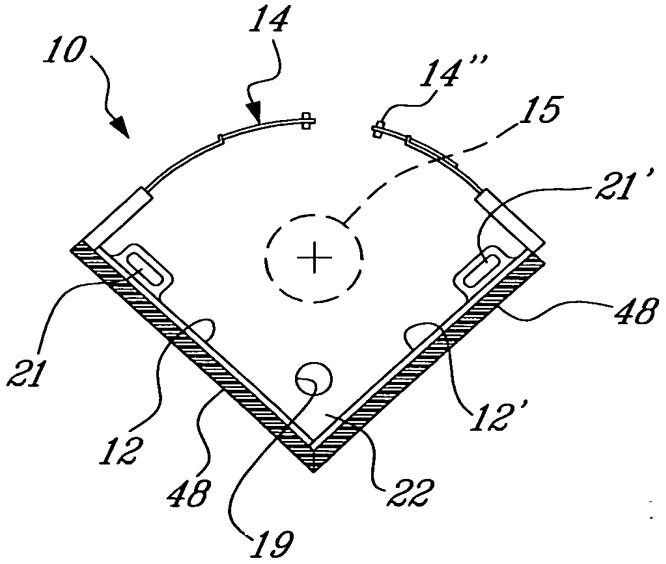
14
10
14''
15
21'
48
21
12
48
19
22
12'

Fig- 2

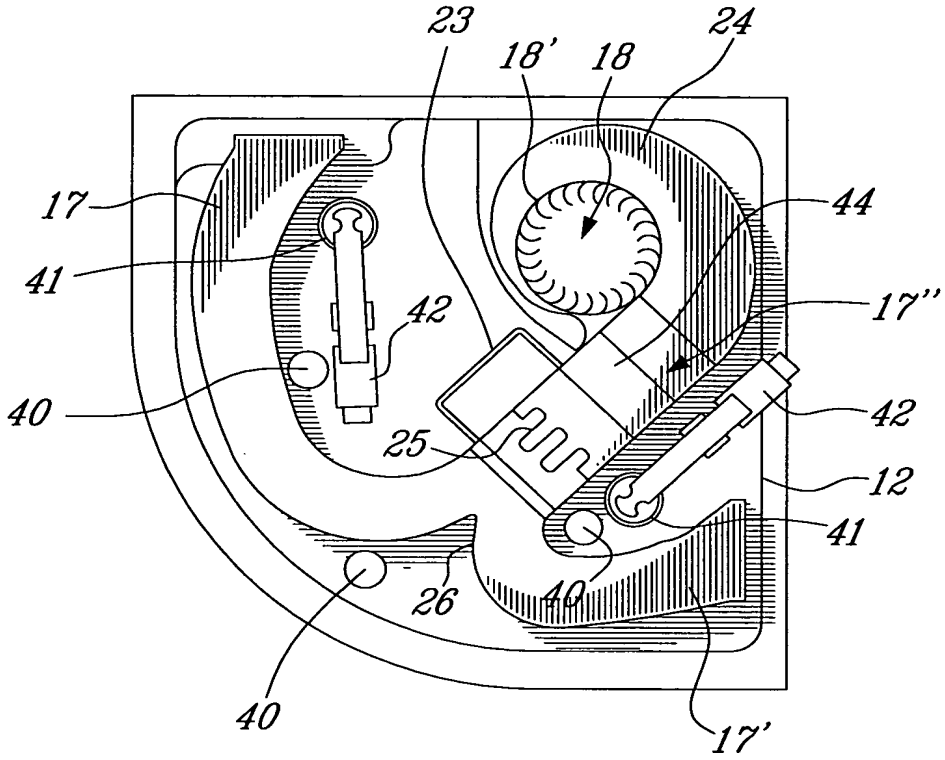

Fig-3

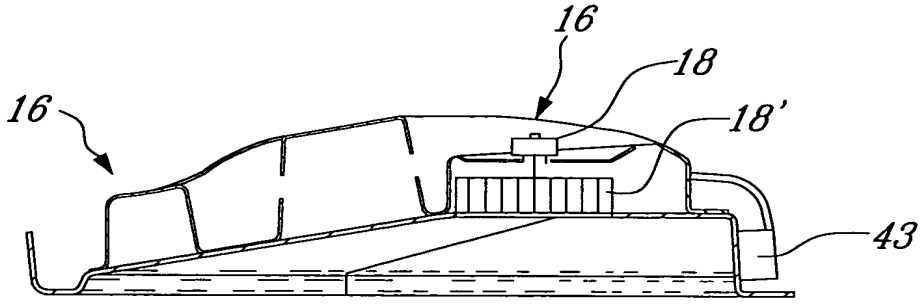

Fig-4

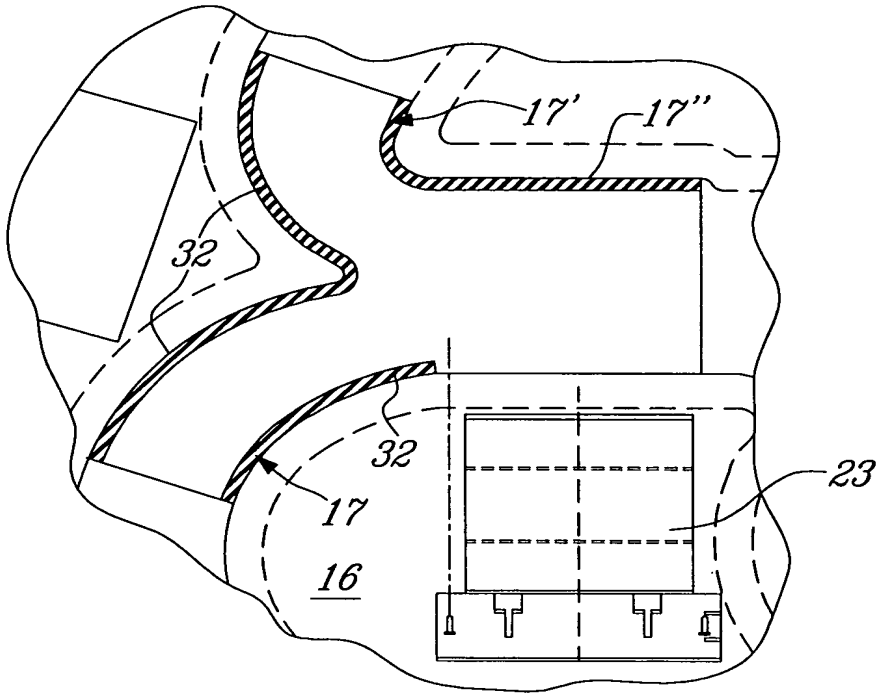

Fig- 5

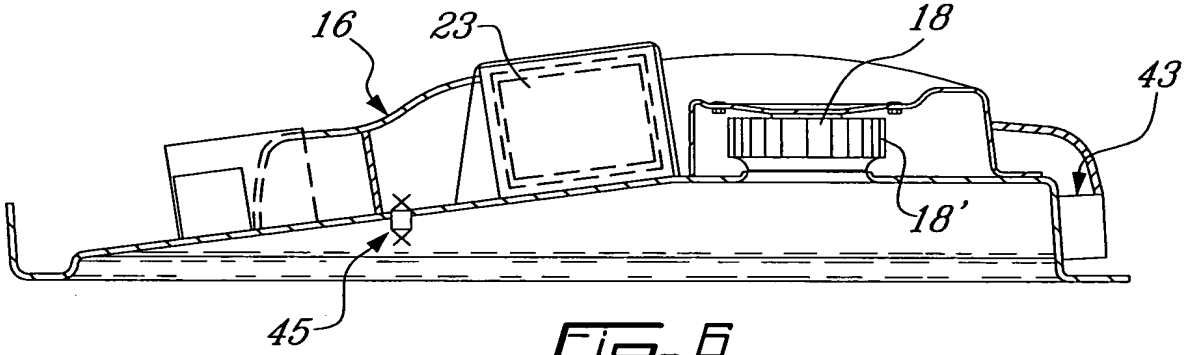

Fig- 6

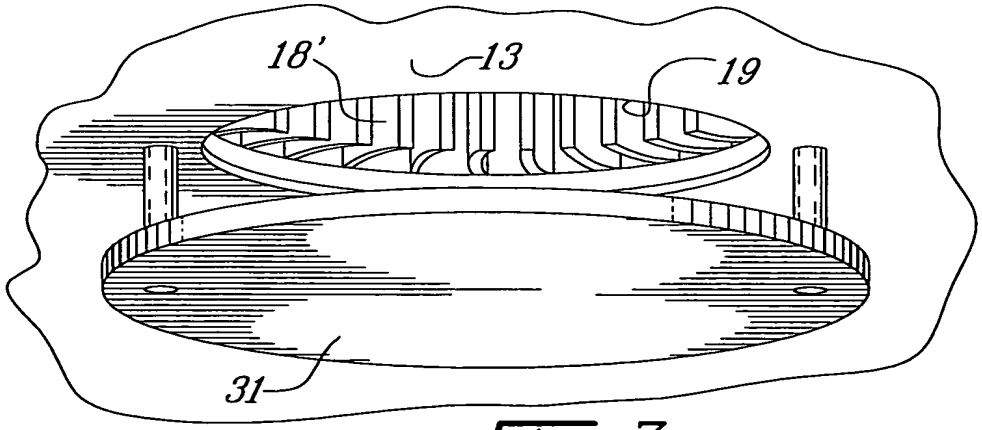

Fig- 7

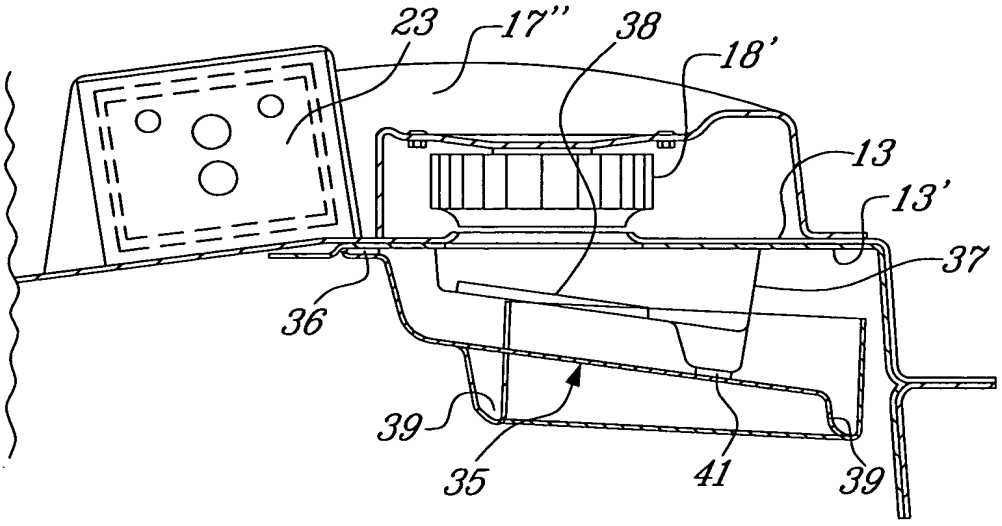

Fig- 8

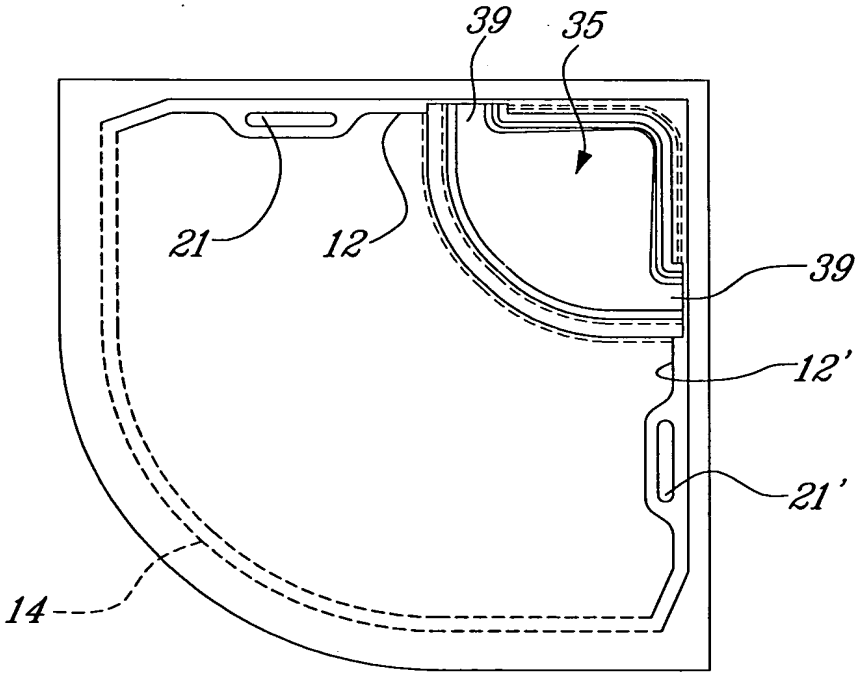

Fig- 9

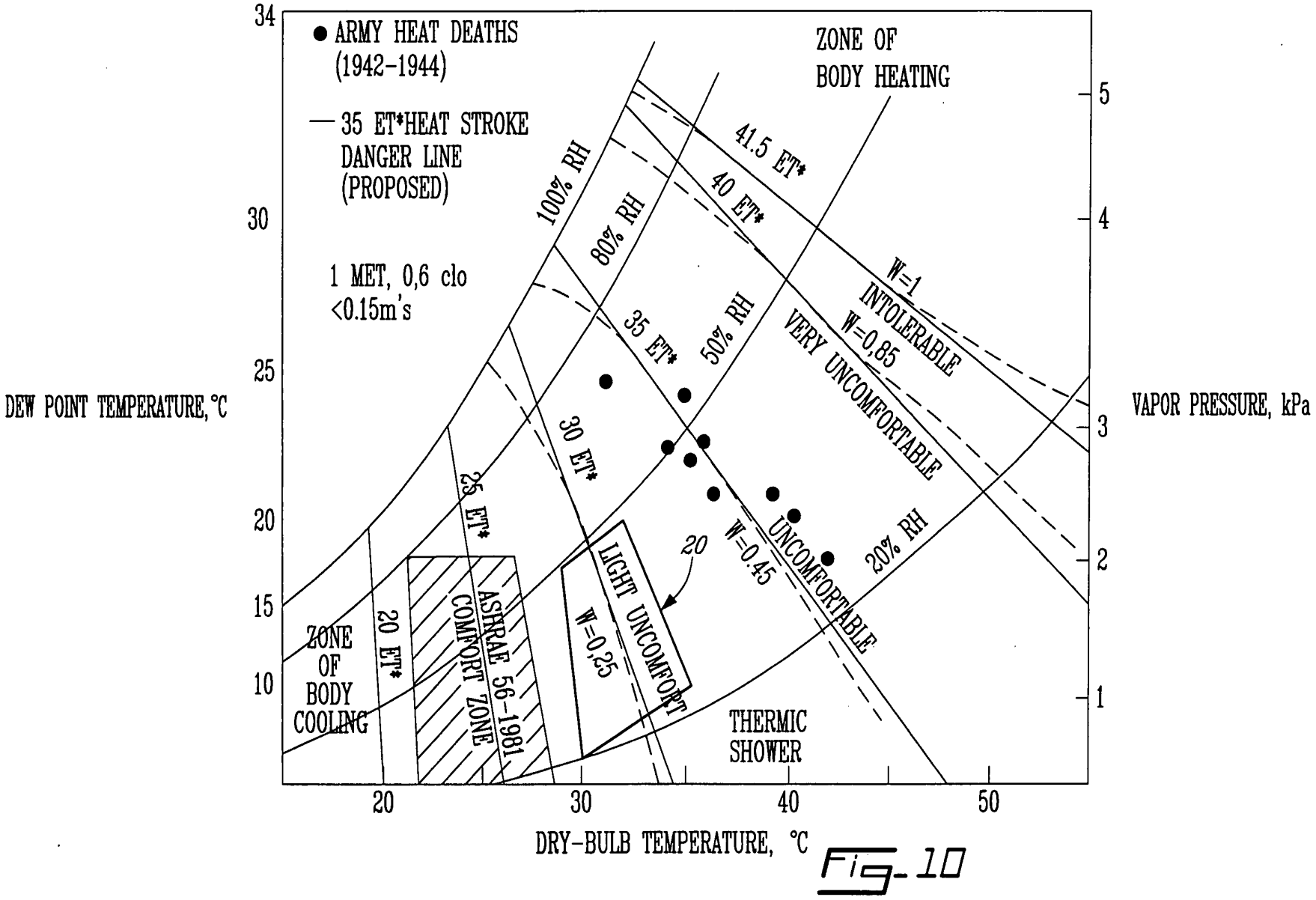
● ARMY HEAT DEATHS (1942-1944)
— 35 ET*HEAT STROKE DANGER LINE (PROPOSED)
1 MET, 0,6 clo
<0.15m's
ZONE OF BODY HEATING
100% RH
80% RH
50% RH
20% RH
41.5 ET*
40 ET*
35 ET*
30 ET*
25 ET*
20 ET*
W=1
INTOLERABLE
W=0,85
VERY UNCOMFORTABLE
W=0.45
UNCOMFORTABLE
W=0,25
LIGHT UNCOMFORT
20
ASHRAE 56-1981 COMFORT ZONE
ZONE OF BODY COOLING
THERMIC SHOWER
DEW POINT TEMPERATURE, °C
VAPOR PRESSURE, kPa
DRY-BULB TEMPERATURE, °C
34
30
25
20
15
10
5
4
3
2
1
20
30
40
50

Fig-10

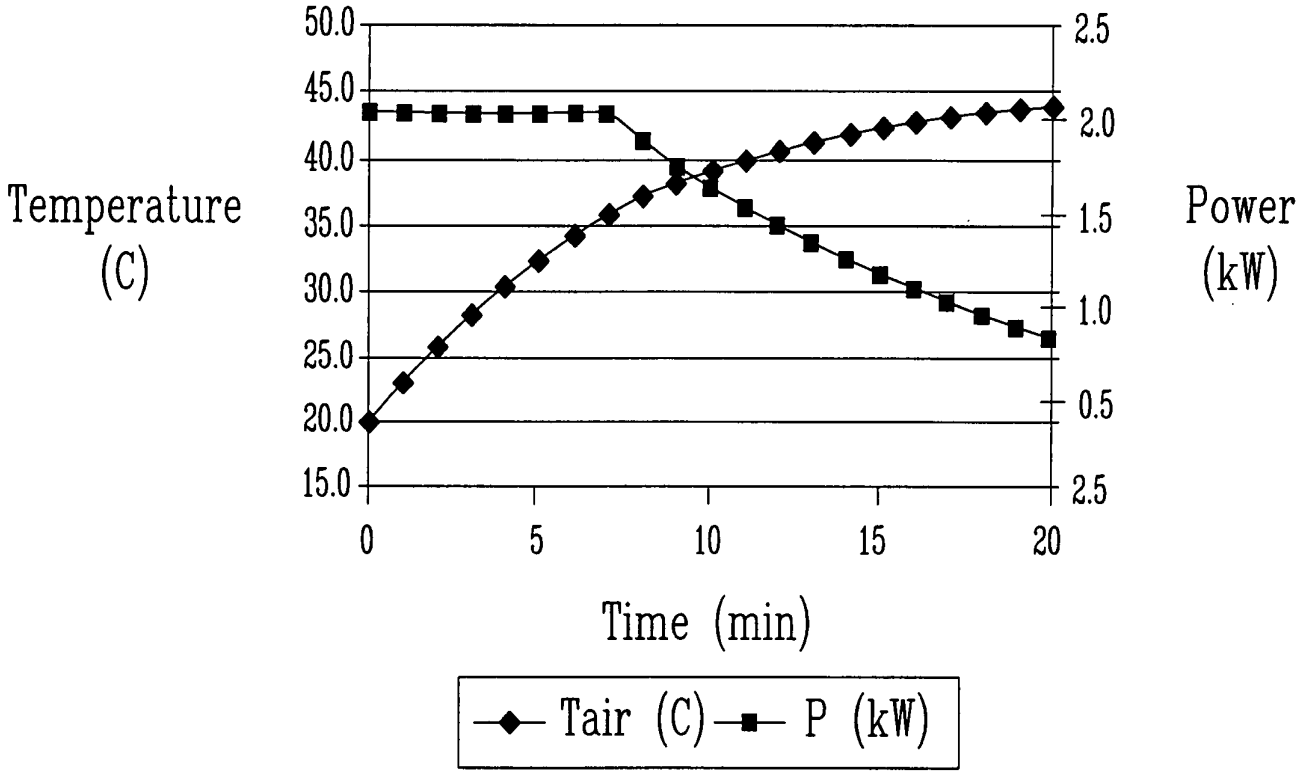
Temperature (C)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
2.5
2.0
1.5
1.0
0.5
2.5
Power (kW)
0
5
10
15
20
Time (min)
Tair (C)
P (kW)

Fig. 11